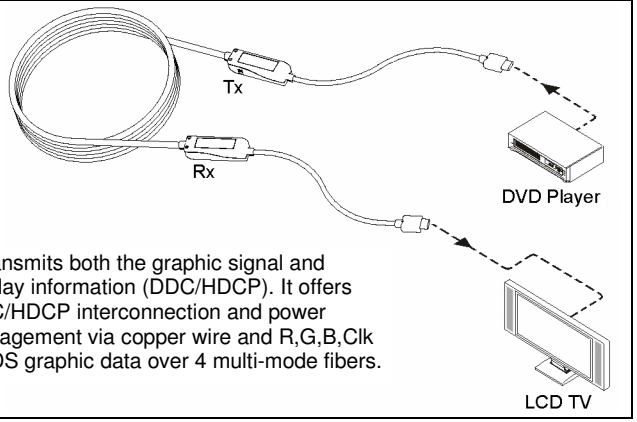
Fiber Optic HDMI Cable: (C-FOHM/FOHM (1.3))

Congratulations on purchasing your Fiber Optic HDMI Male Cable. It is fully compatible with both HDMI and DVI, and is ideal for home theater systems, medical and military digital display systems, as well as conference rooms and stadiums. This cable is available at lengths of 33ft (10m), 66ft (20m), 98ft (30m), 164ft (50m), and 328ft (100m). It comes with this user manual and a +5V AC/DC power adapter.

The Fiber Optic HDMI Male Cable is a digital high-quality graphics interface between an HDMI source (for example, a DVD player) and an HDMI acceptor (for example, an LCD TV). It consists of a transmitter (Tx) module and a receiver (Rx) module, connected by multi-channel optic distribution cables with male HDMI connectors at each end.



It transmits both the graphic signal and display information (DDC/HDCP). It offers DDC/HDCP interconnection and power management via copper wire and R,G,B,Clk TMDS graphic data over 4 multi-mode fibers.

Features

The Kramer Fiber Optic HDMI Male Cable (C-FOHM/FOHM (1.3)):

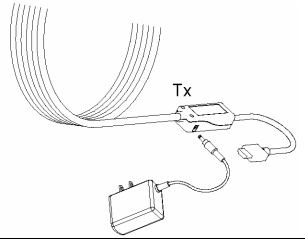
- Supports all HD standards up to 1080p, and all VESA resolutions up to WUXGA (1920x1200), at 60Hz refresh rate with 1 pixel/clock mode
- Is a hybrid cable with four multi-mode fibers cables for the HDMI interface and embedded copper wires to support the DDC2B/HDCP, Hot Plug Detect and power management
- Can use either +5V internal power supplied via the HDMI / DVI graphic source, or from the external +5V power adapter
- Requires no software installation

Connecting the Fiber Optic HDMI Cable

Unpack the equipment carefully and save the box and packaging materials for possible future shipment.

To connect the Fiber Optic HDMI Male Cable, as the example above shows, do the following:

1. Connect the HDMI Tx connector of the Optical HDMI Cable to the HDMI source (for example, a DVD player), without powering up the source. Note that the HDMI / DVI multimedia system or graphic card must support the maximum graphic resolution of the acceptor that is to be connected. Also, do not connect any intermediate cable or adapter between them as this may cause deterioration in signal transmission performance.
2. Plug the +5V power adapter to the Tx module power socket and connect the adapter to the mains electricity.



After connecting the system, and confirming that it works, you can try to disconnect the power adapter. If the system still works you do not need the power adapter. If it does not work, reconnect the power adapter (see step 4 for further explanation).

3. Connect the HDMI Rx connector of the Optical HDMI Cable to the HDMI acceptor (for example, an LCD TV).
   Do not connect any intermediate cable or adapter between them (this may result in a deteriorated signal transmission performance).
4. Switch ON the power on each device (in this case, on the DVD player and on the LCD TV). The Fiber Optic HDMI Male Cable uses the +5V internal power supplied through an HDMI pin (#18) / DVI pin (#14) from the graphic source. When that +5V A/V source power is insufficient or non-existent, connect the external AC/DC adapter to power the Tx/Rx modules. If the graphic source can provide 500mA of +5V to pin 18, this external AC/DC adapter is unnecessary. (The +5V power adapter can be plugged into the Tx module even when the Fiber Optic HDMI Male Cable receives sufficient power from the HDMI source). In most cases, HDMI sources can supply sufficient DC power to the two modules.

Avoiding Pitfalls using the Fiber Optic HDMI Cable

▶ Be sure that the Fiber Optic HDMI Male Cable is stored and used away from liquid or dirt.

▶ Handle the cable carefully. This is a fiber optic cable!! Rough handling may break the cable/connections.

▶ If the screen is distorted or displays noise, disconnect and reconnect the Fiber Optic HDMI Male Cable. If the display device shows only a black screen, we recommend the following:

- Be sure that the HDMI ports are firmly plugged into the HDMI source and the HDMI display device, and that the correct Tx and Rx parts plug into the HDMI source / display device, respectively
- Check if the HDMI source and HDMI display device are powered ON and properly booted
- Reset the system by unplugging and then replugging in the Tx HDMI port or Rx HDMI port, or by unplugging and then replugging in the power cord plug of the Tx module

Technical Specifications

The technical specifications are subject to change without notice:

COMPLIANCE WITH HDMI STANDARD:	Supports HDMI 1.3 and DVI 1.0 (DDC2B), fully implemented by fiber-optic communication
EXTENSION LIMIT:	100m (330 feet) for 1080p /WUXGA (1920 x 1,200) at 60Hz refresh rate
GRAPHIC TRANSMISSION BANDWIDTH:	Supports 1080p / WUXGA at 60Hz, or 1.65Gbps bandwidth per graphic channel
HYBRID FIBER-OPTIC CABLE:	Flame retardant PVC employing 4 fiber strands and 5 shielded copper wires
TENSILE LOAD:	180N
MINIMUM BEND RADIUS:	15.4cm
OUTER DIAMETER OF CABLE:	7.2cm
CLAMPING STRENGTH TO CABLE:	$14kg_f$
TEMPERATURE:	0°C to 50°C (OPERATING); -40°C to 70°C (STORAGE)
HUMIDITY:	5% to 85%
POWER SOURCE:	AC 100-240V, 50/60Hz 0.1A
DIMENSIONS:	21mm, 77mm, 21mm (W, D, H)
WEIGHT:	0.3 kg. (0.67 lbs.) approx.
ACCESSORIES:	Power supply

LIMITED WARRANTY

Kramer Electronics (hereafter *Kramer*) warrants this product free from defects in material and workmanship under the following terms.

HOW LONG IS THE WARRANTY

Labor and parts are warranted for one year from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

1. Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the web site www.kramerelectronics.com.
2. Any product, on which the serial number has been defaced, modified or removed.
3. Damage, deterioration or malfunction resulting from:
   - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
   - ii) Product modification, or failure to follow instructions supplied with the product
   - iii) Repair or attempted repair by anyone not authorized by Kramer
   - iv) Any shipment of the product (claims must be presented to the carrier)
   - v) Removal or installation of the product
   - vi) Any other cause, which does not relate to a product defect
   - vii) Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

1. Removal or installations charges.
2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
3. Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
2. Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
3. For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

1. Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:
2. Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

NOTE: All products returned to Kramer for service must have prior approval. This may be obtained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

EN-50081: "Electromagnetic compatibility (EMC); generic emission standard. Part 1: Residential, commercial and light industry"

EN-50082: "Electromagnetic compatibility (EMC) generic immunity standard. Part 1: Residential, commercial and light industry environment".

CFR-47: FCC Rules and Regulations: Part 15: "Radio frequency devices Subpart B – Unintentional radiators"

CAUTION!

- Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.
- Use the supplied DC power supply to feed power to the machine.
- Please use recommended interconnection cables to connect the machine to other components.

Fiber Optic HDMI Cable Instructions:

C-FOHM/FOHM (1.3)

For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com

Kramer Electronics, Ltd.

Web site: www.kramerelectronics.com

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